

REBUTTAL TESTIMONY

OF

CHARLES A. BROWN

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2007 APR 26 A 10:37
COMMISSION
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- 1 **Q. Please state your full name, by whom you are employed and**
2 **In what capacity?**
3 A. Charles A. Brown, Commonwealth Edison Company ("ComEd"),
4 Engineer in the Distribution Testing Department of ComEd.
5 **Q. How long have you been employed at ComEd and how long**
6 **have you been in your current position?**
7 A. I have worked for ComEd for 34 years, 16 years in the Distribution
8 Testing Department .
9 **Q. Please describe your duties as an Engineer in the Distribution**
10 **Testing Department?**
11 A. I am assigned to ComEd's University Park Office. I work in the
12 field and generally handle customer voltage complaints; underground
13 cable fault locating; setting and troubleshooting voltage conditioning
14 equipment; calibrating and testing equipment, such as transformers,
network protectors, automatic throwovers and line sectionalizers.
15 **Q. Do you have any special training for your job?**
16 A. Yes. I have special training in all of the above duties, as well as
17 overhead electrician work.
18 **Q. Please describe how you became familiar with the voltage**
19 **problems at the farm owned by the Complainant, Virginia**
20 **Gates?**
21 A. Around August 28, 2006, I was assigned to follow-up on the August 21,
22 2006 testing of Ms. Gates voltage performed by an Overhead
23 Electrical Specialist within ComEd's Operations Department. I have
24 made numerous visits to Ms. Gates' farm to check the voltage and
25 respond to the low voltage problems complained of by Ms. Gates.
26 **Q. What is the purpose of your Rebuttal Testimony in this**
27 **proceeding?**
28 A. I would like to respond to certain points raised by Commission
29 Electrical Engineer, Greg Rockrohr in his written testimony,
30 ICC Staff Exhibit 1.0.
31 **Q. Before responding to specific points raised by Mr. Rockrohr,**
32 **do you have any general comments you would like to make?**
33 A. Yes. Attached hereto is a summary of the responses made to Ms.
34 Gates since the inception of her voltage problems, ComEd
35 Exhibit 1.1. As you can see from this Exhibit, which I had prepared

36 from the books and records of ComEd and my own field notes,
37 I and other ComEd personnel were very responsive to the voltage
38 problems complained of by Ms. Gates beginning on July 31, 2006.
39 I can state that ComEd installed Capacitor Banks on August 18,
40 2006, and from September 9 to December 4, 2006, Ms. Gates
41 did not complain about voltage problems.

42 **Q. In response to Mr. Rockrohr, let us first look at Page 6, Lines**
43 **140-143 of his testimony. In this portion of his testimony, Mr.**
44 **Rockrohr questions whether a voltage monitor should have**
45 **been installed at Complainant's premise in July or August,**
46 **2006. What is your response?**

47 **A.** The test results that I have previously alluded to were given to Tom
48 Diamond in my department. In the response that was given to the
49 Commission, attached as ComEd Exhibit 1.2, the result of the test
50 was 127/127 VAC (voltage alternating current) without load and
51 126/126 VAC with load. These results are within the Commission
52 standards of 83 Ill Adm. Code 410.300 and within ComEd
53 standards which adopt the Commission's standard. Based on
54 these results, it did not reasonably appear necessary to institute
55 further monitoring or testing during July or August, 2006.

56 **Q. Mr. Rockrohr discusses the voltage monitor that was installed**
57 **at Ms. Gates premise between October 26-November 1, 2006,**
58 **and states that the voltage delivery was higher than allowed**
59 **by 83. ILL. Adm. 410.330, and that there is no evidence that**
60 **the high voltage would be excused under Section 410.330c),**
61 **Page 7, Lines 148-152 and Page 7, Lines 156-158. What is**
62 **your response?**

63 **A.** The voltage was high during this period due to a complex situation.
64 There was an ever increasing load, circuit balancing and voltage
65 conditioning equipment issues. First, low load periods are periods
66 of low voltage use. During low load periods, it is common for
67 there to be increased levels of unexpended voltage in one or more
68 of the three circuit phases. Naturally, when monitors measure
69 during these periods, a higher voltage reading is produced.
70 Second, if a capacitor bank is attached to a circuit phase that has
71 A low voltage level, it will feed volts to all phases of the circuit.
72 Simply, it uses the deficient phase, which it is monitoring as a
73 sample of all three circuit phases. This will occur even if one or more of
74 the other circuit phases are at normal levels. These events, separately or
75 in conjunction, may result in higher voltage readings. This is what
76 occurred during this October 26 – November 1, 2006 monitoring
77 period. The capacitor bank monitored the circuit phase during
78 A typical upward fluctuation consistent with low load period. When
79 the capacitor bank activated during the low load phase, it boosted
80 levels beyond standard levels. This sort of imbalance is
81 contemplated in 83 Ill Adm. Code 410.330 c) 3).

82 Q. Did you ever advise Mr. Rockrohr that 129 volts was proper
83 voltage?
84 A. No.
85 Q. Mr. Rockrohr complained that it took too long for ComEd to
86 correct voltage from late October when the monitor was
87 installed to December, 2006, Page 10, Lines 214-217. What is
88 your response?
89 A. I disagree. During that period between November and December,
90 we checked Ms. Gates premise voltage and in the general area as
91 well. Our voltage checks were good, which let us to believe that
92 we were not in violation of Section 410.330. We also checked
93 loading at the ComEd distribution center and in the area of this
94 customer's tap, which indicated more circuits balancing was
95 needed. The circuits balancing would allow the capacitors to
96 work more efficiently.
97 Q. Mr. Rockrohr does not know whether the December, 2006
98 corrective measures will work without installing another
99 monitor when the weather gets hot. Page 11, Lines 246 – 247.
100 What is your response?
101 A. If Ms. Gates were to complain about voltage problems in the
102 summer, 2007, we would consider placing monitors at Ms. Gates
103 premises. ComEd would not set monitors without some showing
104 that corrective measures had, in fact, failed due to hot weather.
105 Q. Mr. Rockrohr also criticized ComEd for not taking corrective
106 actions in October 2006 regarding complainant's voltage
107 problems, Page 14, Lines 306 – 307. What is your response?
108 A. As I stated previously, we checked the voltage at the customer's home as
109 well as in the area and found good voltage. We also checked for circuit
110 balancing and found that when more was needed, we did further circuit
111 balancing.
112 Q. Could you briefly summarize your position regarding Ms.
113 Gates complaint?
114 A. Yes. ComEd responded to voltage problems as soon as the
115 issues were communicated. Ms. Gates' initial complaint was for low
116 voltage, but when I went out to the farm and had her run her corndryer, I
117 did not see any low voltage. That let me know that the voltage was
118 coming in at a level to operate her equipment. I would also point out that
119 load balancing began as early as August 29, 2006. The voltage was high
120 only during low load periods and was corrected as soon as
121 possible. There were no voltage complaints between September
122 9 – December 4, 2006. ComEd did not violate Section 410.330.
123 Q. Does this conclude your testimony?
124 A. Yes.